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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,979	09/22/2003	Yoshiaki Sakatani	Q77382	4959

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EXAMINER

WARTALOWICZ, PAUL A

ART UNIT PAPER NUMBER

1754

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/664,979

Applicant(s)

SAKATANI ET AL.

Examiner

Paul A. Wartalowicz

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/18/04, 04/19/04, 06/16/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ichinose et al. (E.P. 1031538).

Ichinose et al. teach a method for producing a titanium oxide (page 4, lines 21-24), which comprises the steps of adding hydrogen peroxide solution to titanium tetrachloride or titanium sulfate (page 6, lines 38-39), then a basic substance at a temperature of 40° or lower (page 4, lines 35-36) with stirring (page 9, lines 52), wherein the hydroxyl group provided by the base is in a molar amount of at least 2 times of the titanium atom in the titanium compound (page 9, lines 12-15), is added to the mixture to obtain a precipitate, wherein the precipitate is washed, filtered, charged with sodium hydroxide (page 12, lines 7-10), the mixture is then left to stand at room temperature (page 6, lines 50-52), and then heated at a temperature of 80°C or higher

(washing and drying at room temperature comprise aging, aged in the presence of a base (sodium hydroxide), page 6, lines 50-55, page 10, lines 35-48).

Claims 1-5 and 7 are rejected under 35 U.S.C. 102(a) as being anticipated by Sakatani et al. (E.P. 1279643).

Sakatani et al. teach a method for producing titanium oxide wherein titanium oxysulfate is mixed with hydrogen peroxide, the resulting mixture is mixed with ammonia (is added into and reacted with is equivalent to stirring, page 3, lines 30-35) in an amount exceeding a requiring amount for converting titanium compound (ammonia is added such that the hydroxyl group is in a molar amount of more than 1 times of the titanium atom, page 3, lines 30-35) wherein the resulting product is washed, dried and then calcined at a temperature of from 300°C to 500°C (washing and drying comprises aging, page 3, lines 30-35).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. 6107241 teach a method for producing titanium oxide (col. 3, lines 3-6) wherein ammonia is added to titanium tetrachloride, then hydrogen peroxide is added to the mixture (col. 2, lines 45-55); the mixture is dried and fixed on a substrate (drying and fixing on a substrate comprise aging, col. 3, lines 3-6) and then heated to a temperature of 250°C or above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A. Wartalowicz whose telephone number is (571) 272-5957. The examiner can normally be reached on 8:30-6 M-Th and 8:30-5 on Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (571) 272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul Wartalowicz  
January 13, 2006



COLLEEN P. COOKE  
PRIMARY EXAMINER